at least one superconducting element for levitating said magnetic pumping or mixing element;

a wall defining a chamber for thermally isolating the superconducting element from the vessel;

a cooling source thermally linked to said superconducting element in said chamber; and

a motive device for rotating said superconducting element and said wall together.

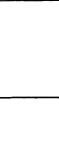
Please cancel claim 56.

Please amend claim 57 as follows:

57. (Amended) The system for pumping or mixing a fluid according to claim 55, wherein a thermal link to said cooling source extends at least partially through said chamber and directly supports the superconducting element, said wall defining said chamber is supported by a bearing permitting rotational motion, said motive device is a motor coupled to said chamber by an endless belt, and said endless belt transfers the rotary motion produced by said motor to said wall and said thermal link to rotate the superconducting element.

Please amend claim 58 as follows:

58. (Amended) The system for pumping or mixing a fluid according to claim 55, wherein said cooling source contains a liquid cryogen and is attached to and rotates with said wall and chamber.



Please amend claim 59 as follows:



59. (Amended) The system for pumping or mixing a fluid according to claim 55, wherein said chamber housing said superconducting element is positioned below said magnetic pumping or mixing element in said vessel.